

Applicant's response to each of the examiner's rejections:

1. The examiner objects to the drawings under 37 CFR 1.84 for being not readable and not having satisfactory reproduction characteristics.

The applicant respectfully submits, for review by the Official Draftsperson, 96 sheets of new drawings, including FIGs. 1-132, which are readable and have satisfactory reproduction characteristics.

2. The examiner rejected claims 2-10 and 14-26 under 35 USC 112, first paragraph, as failing to comply with the written description requirement. Regarding claims 2-10, the examiner asserts that it is unclear how the controller determines the data in each claim and how determining this data controls the equipment. Regarding claims 14-26, the examiner asserts that it is unclear how the controller controls the desired functions and/or modules in each of the claims.

The applicant amended claims 2-10 and 14-26 to clarify how the controller controls the operation of the agricultural bale accumulator.

Support for the amended claims and their operation may be found in the present specification, for example, on page 101, line 30 (e.g., beginning with section "XII. Field Location Control Module") to page 111, line 27 (e.g., end of section "XIII. Agricultural Bale Accumulator Block Diagram").

3. The examiner rejected claims 1, 5, 7, 8, 10, 11, and 25-28 under 35 USC 103(a) as being unpatentable over Vellidus, et al. (US Patent No. 6,525,276)

Vellidus, et al. teaches: "a crop yield monitoring system and method which can be used during harvesting of a crop, such as peanuts, pecans, Vidalia onions, and others, which are transported into a collection basket in order that crop yield can be determined based on measuring mass changes of the collection basket. The invention provides crop yield mapping data for evaluating crop yield at locations in a site-specific farming area." (col. 4, lines 16-23) "The peanut pods are removed from the plant vines." (col. 5, line 27) An air delivery system conveys the peanut pods to the storage or collection basket 40 disposed on the top of the combine. (col. 5, lines 42-44)

Vellidus, et al. includes only one reference to a "baler" in col. 1, lines 42-45, which does not relate to controlling the baler based on its location in a field, and which describes signal noise remaining a severe limitation to forage yield monitoring.

The applicant amends independent claims 1 and 26 to overcome the examiner's rejection of claims 1, 5, 7, 8, 10, 11, and 25-28 under 35 USC 103(a) as being unpatentable over Vellidus, et al.

Independent claims 1 and 26 each claim, for example: "An agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler ..." Note that "a bale accumulator" was originally claimed in claim 13.

Vellidus, et al. teaching of a combine that removes harvested crop from a vine and transports the harvested crop into a collection basket is not the same as and does not render obvious the claimed "agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler," for at least the following reasons.

Vellidus, et al. teaches a combine; whereas, the claims claim "an agricultural bale accumulator." There is no basis in Vellidus, et al. for modifying Vellidus, et al. combine to meet the claimed limitation of "an agricultural bale accumulator."

Vellidus, et al. teaches removing crop from a vine; whereas, the claims claim "agricultural bales of crop material." Vellidus, et al. is not properly modifiable when its intended function is destroyed because of the difference in the crop material.

Vellidus, et al. teaches transporting the harvested crop into a collection basket; whereas, the claims claim "an agricultural bale accumulator adapted to receive agricultural bales of crop material." Vellidus, et al. is not properly modifiable when its intended function is destroyed because of the difference in transporting the crop material.

Vellidus, et al. teaches a combine that removes harvested crop from a vine; whereas, the claims claim: "crop material formed by and ejected from an agricultural baler." Vellidus, et al. is not properly modifiable when its intended function is destroyed because of the difference in machinery forming and handling the crop material.

Nowhere does Vellidus, et al. teach or suggest the use of site-specific farming (e.g., GPS) in combination with "an agricultural bale accumulator" and/or "agricultural bales of crop material." There is no basis in Vellidus, et al. for combining these teachings or modifying Vellidus, et al. to meet the claimed limitations.

Vellidus, et al. reference to a "baler" taught in col. 1, lines 42-45 of the Background Section describes signal noise remaining a severe limitation to forage yield monitoring, and does not relate to controlling the baler based on its location in a field. Vellidus, et al. appears to teach or suggest the "baler" in col. 1, lines 42-45, as a reference for yield monitoring. Nowhere does Vellidus, et al. teach or suggest the "baler" taught in col. 1, lines 42-45 in

combination with the use of site-specific farming (e.g., GPS). There is no basis in Vellidus, et al. for combining these teachings or modifying Vellidus, et al. to meet the claimed limitations.

Vellidus, et al. does not teach or suggest the problems or the problems' source, associated with the claimed "agricultural bale accumulator," "agricultural bales of crop material," and "agricultural baler." Therefore, Vellidus, et al. teachings cannot provide a solution to the problems associated with the claimed "agricultural bale accumulator."

Vellidus, et al. teaches away from the claimed "agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler" because Vellidus, et al. teaches a different machine, a different crop material, a different way to harvest the crop material, and a different way to transport the different crop material.

Further, dependent claims 2-25 and dependent claims 27-35 include additional limitations that further define the present invention to further distinguish over Vellidus, et al.

Therefore, for at least these reasons, the present independent claims 1 and 26 are patentable over Vellidus, et al., and the examiner's rejection under 35 USC 103(a) as being unpatentable over Vellidus, et al. should be withdrawn.

4. The examiner rejected claims 1, 4, 6-11, and 25-28 under 35 USC 103(a) as being unpatentable over Hale, et al. (US Patent No. 5,902,343)

Hale, et al. teaches: "A field mapping system for an agricultural vehicle such as a combine, planter or cultivator is disclosed herein. The system includes a circuit for determining the position of the vehicle relative to a field, and a sensor for sensing a characteristic (e.g., grain moisture content, grain harvest yield, soil compaction, altitude, etc.) at locations of the vehicle within the field." (Abstract)

The applicant amends independent claims 1 and 26 to overcome the examiner's rejection of claims 1, 4, 6-11, and 25-28 under 35 USC 103(a) as being unpatentable over Hale, et al.

Independent claims 1 and 26 each claim, for example: "An agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler ..."

Hale, et al. teaching of "a field mapping system for an agricultural vehicle, such as a combine, planter or cultivator," is not the same as and does not render obvious the claimed

“agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler,” for at least the following reasons.

Hale, et al. teaches “an agricultural vehicle, such as a combine, planter or cultivator;” whereas, the claims claim “an agricultural bale accumulator.” There is no basis in Vellidus, et al. for modifying Hale, et al. agricultural vehicle, such as a combine, planter or cultivator to meet the claimed limitation of “an agricultural bale accumulator.”

Hale, et al. does not teach or suggest the claimed “agricultural bales of crop material.” Hale, et al. is not properly modifiable when its intended function is destroyed because of the difference in the crop material.

Hale, et al. does not teach or suggest the claimed “an agricultural bale accumulator adapted to receive agricultural bales of crop material.” Hale, et al. is not properly modifiable when its intended function is destroyed because of the difference in transporting the crop material.

Hale, et al. does not teach or suggest the claimed: “crop material formed by and ejected from an agricultural baler.” Hale, et al. is not properly modifiable when its intended function is destroyed because of the difference in machinery forming and handling the crop material.

Nowhere does Hale, et al. teach or suggest the use of site-specific farming (e.g., GPS) in combination with “an agricultural bale accumulator” and/or “agricultural bales of crop material.” There is no basis in Hale, et al. for combining these teachings or modifying Hale, et al. to meet the claimed limitations.

Hale, et al. does not teach or suggest the problems or the problems’ source, associated with the claimed “an agricultural bale accumulator,” “agricultural bales of crop material,” or “an agricultural baler.” Therefore, Hale, et al. teachings cannot provide a solution to the problems associated with the claimed “agricultural bale accumulator.”

Hale, et al. teaches away from the claimed “agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler” because Hale, et al. teaches a different machine, a different crop material, a different way to harvest the crop material, and a different way to transport the different crop material.

Further, dependent claims 2-25 and dependent claims 27-35 include additional limitations that further define the present invention to further distinguish over Hale, et al.

Therefore, for at least these reasons, the present independent claims 1 and 26 are patentable over Hale, et al., and the examiner’s rejection under 35 USC 103(a) as being unpatentable over Hale, et al. should be withdrawn.

5. The examiner rejected claims 1-15 and 17-30 under 35 USC 103(a) as being unpatentable over the known baler disclosed by applicants on page 1, lines 22-31 of the present specification, or newly cited Lundahl, et al (US Patent No. 4,951,452) in view of Vellidus, et al. and/or Hale, et al.

Lundahl, et al teaches: “A hay baler including a trailer frame with a hitch for attachment to a prime mover and support wheels. A crop pick-up unit moves cut crop into a material storage area, from where it is moved into a bale chamber and is compacted by a compression unit and tied with twine before being discharged to ground from the rear of the trailer frame.” (Abstract)

Independent claims 1 and 26 each claim, for example: “An agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler ...”

Hale, et al. teaches “a field mapping system for an agricultural vehicle, such as a combine, planter or cultivator,” Vellidus, et al. teaches “a combine that removes harvested crop from a vine,” and Lundahl, et al teaches a “hay baler.” The teachings Hale, et al. and/or Vellidus, et al. in combination with the teaching of Lundahl, et al is not the same as and does not render obvious the claimed “agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler,” for at least the following reasons.

Hale, et al. teaches “an agricultural vehicle, such as a combine, planter or cultivator,” Vellidus, et al. teaches “a combine,” and Lundahl, et al teaches “a hay baler.” By contrast, the claims claim “an agricultural bale accumulator.” There is no basis in one or more of the three cited references for modifying one or more of the three cited references to meet the claimed limitation of “an agricultural bale accumulator.”

Neither Hale, et al. nor Vellidus, et al. teaches or suggests the claimed “agricultural bales of crop material.” Therefore, Hale, et al. or Vellidus, et al. is not properly modifiable by Lundahl, et al teaching of “a hay bale” when its intended function is destroyed because of the difference in the crop material among the three cited references.

Neither Hale, et al. nor Vellidus, et al. teaches or suggests the claimed “an agricultural bale accumulator adapted to receive agricultural bales of crop material.” Therefore, Hale, et al. or Vellidus, et al. is not properly modifiable by Lundahl, et al teaching of “a hay baler for producing hay bales” when its intended function is destroyed because of the difference in transporting the crop material among the three cited references.

Neither Hale, et al. nor Vellidus, et al. teaches or suggests the claimed: “crop material formed by and ejected from an agricultural baler.” Therefore, Hale, et al. or Vellidus, et al. is not properly modifiable by Lundahl, et al teaching of “a hay baler for producing hay bales” when its intended function is destroyed because of the difference in machinery forming and handling the crop material.

Nowhere does Hale, et al., Vellidus, et al., or Lundahl, et al, either alone or in combination, teach or suggest the use of site-specific farming (e.g., GPS) in combination with “an agricultural bale accumulator” and “agricultural bales of crop material.” There is no basis in one or more of the three cited references for combining the teachings of the three cited references or modifying the three cited references to meet the claimed limitations.

Nowhere does Hale, et al., Vellidus, et al., or Lundahl, et al, either alone or in combination, teach or suggest the problems or the problems’ source, associated with the claimed “agricultural bale accumulator” and “agricultural bales of crop material.” Therefore, Hale, et al. teachings cannot provide a solution to the problems associated with the claimed “agricultural bale accumulator.”

The three cited references, either alone or in combination, teach away from the claimed “agricultural bale accumulator adapted to receive agricultural bales of crop material formed by and ejected from an agricultural baler” because each of the three cited references a different machine and a different way to transport the different crop material, and Hale, et al. and Vellidus, et al. each teach a different crop material and a different way to harvest the crop material.

For at least these reasons, the three cited references, either alone or in combination, require more than replacing manual means with mechanical or automatic means to accomplish the same results, as achieved by the present independent claims 1 and 26, for example.

Further, dependent claims 2-25 and dependent claims 27-35 include additional limitations that further define the present invention to further distinguish over the cited references.

For at least these reasons, the present independent claims 1 and 26 are patentable over the three cited references. Therefore, the examiner’s rejection of claims 1-15 and 17-30 under 35 USC 103(a) as being unpatentable over the known baler disclosed by applicants on page 1, lines 22-31 of the present specification, or newly cited Lundahl, et al in view of Vellidus, et al. and/or Hale, et al. should be withdrawn.

6. The examiner objected to claims 31-35 for being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The applicant appreciates the examiner's indication of allowable claims. The applicant respectfully submits that adding the "bale accumulator" limitation from intervening claim 13 and adding the "baler" limitation from intervening claim 12 to claim 1, and adding the same limitations to claim 26 overcomes the examiner's present rejections.

7. The applicant respectfully submits that claims 1-35 describe an improved agricultural bale accumulator advantageously providing increased bale accumulating capacity, and/or intelligent bale accumulation and bale discharge operations to permit efficient, flexible, and desirable harvesting of hay and forage crop material. The features of the claimed agricultural bale accumulator and/or its associated advantages are not taught or suggested by the references of record, either alone or in combination.

8. The applicant amends the specification on page one to clarify the priority application.

9. The applicant respectfully submits that no new matter has been added to the amended claims or in the new drawings.

10. In view of the foregoing, Applicant submits that all pending claims are in condition for allowance. Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the phone number provided below.

11. The applicants submit herewith a petition under 37 CFR 1.136 for a three month extension of time with an associated fee. This request and amendment is filed on October 5, 2005, under the Certificate of Mailing pursuant to 37 CFR 1.18, within the three month shortened statutory period set for reply in the non-final rejection dated April 5, 2005 plus a three month extension of time under 37 CFR 1.136(a), which expires October 5, 2005, pursuant to MPEP 710.01(a).

12. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,  
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